



SOIL
Service, Inc.
Custom Approaches to Soil Management

Choosing SOIL Service, Inc. for your nutrient needs means you are choosing a complete program. Agronomists are available for consultations, including a complete soil test with micronutrients and recommendations for your individual field.

888-313-2360 | www.soilserviceinc.com

CROP CHOICE® STARTER FERTILIZER | FOLIAR OPP® | 2075-SRN® & MAX72-SRN®
NUTRIENT RECYCLING PROGRAM | SOIL BOOST EXTREME | SOIL BOOST PLUS® | SOIL CAL® | LANDOIL® | RENEGADE VT™

A COMPLETE LINEUP OF LIQUID FERTILIZER SOLUTIONS

Our versatile liquid fertilizer program begins with our own Crop Choice® starter fertilizer, then builds nutrient availability throughout the growing season with either a Foliar Opp® or slow release nitrogen application. We also offer chelated micronutrients and Sugar E-Boost® for specialized crop needs.



SOIL SERVICE LIQUID FERTILIZER PRODUCTS:

- Feed your crops, not the soil.
- Provide immediately available nutrients in seed-safe, usable ion form.
- Won't salt out or change form over time.
- Remain in an aqueous solution regardless of age.
- Are non-corrosive on equipment.
- Are certified for quality. Each batch is analyzed for quality-control before shipment.

PLANT NUTRIENT REQUIREMENTS FOR A 180 BU./ACRE CORN CROP

NUTRIENT	FIRST 25 DAYS		SECOND 25 DAYS	
	%	lbs./acre	%	lbs./acre
Nitrogen (N)	8	19	35	84
Phosphate (P ₂ O ₅)	4	4	27	27
Potash (K ₂ O)	9	22	44	104

Nutrients taken up by corn in 25-day periods after emergence.

CROP CHOICE® STARTS CROPS OFF STRONG

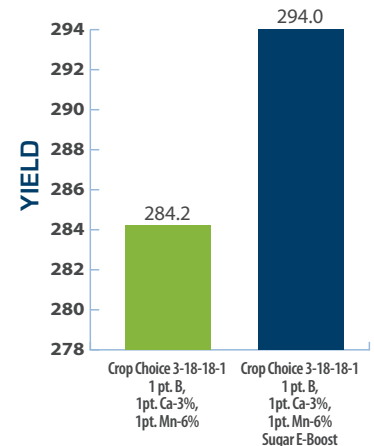
A crucial part of the soil fertility program is starter fertilizer, especially if you want to capitalize on the benefits of planting earlier in the growing season. When soils are wet and cold, an in-furrow boost ensures seeds have direct access to the nutrients they need before the sixth leaf—the critical growth stage when maximum ear size is determined.

At SOIL Service, we recommend our carefully developed Crop Choice starter fertilizer brand of products because it is 100% orthophosphate, so it is 100% available to your crops—unlike the brands sold by many of our competitors. Crop Choice starter fertilizer:

- Is seed-safe for in-furrow placement at our recommended rates.
- Can benefit corn (grasses), soybeans (legumes), and virtually all other crops.
- Allows for a lower application rate than broadcast and 2x2 placement.
- Has a low impurity level, low viscosity, and low salt content.
- Is non-corrosive because of its low salt content and high level of purity.
- Contains potassium, another nutrient that benefits young plants.

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Iowa test plot in-furrow application
 Crop Choice® 3-18-18-1 with 1 pt. Boron (B),
 1 pt. EDTA Chelated Ca-3%, and 1 pt. EDTA
 Chelated Mn-6%, with and without Sugar E-Boost



SUCCESSFUL FOLIAR FEEDING INVOLVES:

Timing

- In soybeans: third to fifth trifoliate stage with possible second application at R3 stage.
- In corn: V4 or V5 stage with possible second application at tasseling.

Technique

- Small spray droplets are preferred.
- Add one pint SOIL BOOST PLUS® per acre to adjust pH of water and enhance absorption and translocation.
- Add Landoil® as your spreader/sticker to help hold products to the leaf, improving coverage and penetration.
- Minimum spray mix of 5–10 gallons per acre is preferred.

FOLIAR FEEDING MAINTAINS NUTRIENT BALANCE

Foliar feeding has become more and more popular among producers who want to maximize yields. Because lack of micronutrients like zinc, manganese, sulfur, and boron can negatively impact yield, we recommend an in-crop, in-season application of Foliar Opp® and slow release nitrogen when a tissue test reveals deficiencies.

FOLIAR OPP
Corn

FOLIAR OPP
Beans

Foliar Opp is our tested orthophosphate potassium liquid fertilizer with a trace element package. We developed two versions—Foliar Opp Beans and Foliar Opp Corn—to meet the unique needs of grass and legume crops. Each version contains a specific blend of micronutrients to help plants maintain proper nutrient balance. Our Foliar Opp products efficiently feed both soybeans for increased pod set and corn for improved ear set and size. You can expect an increase in both yield and quality in beans, corn, alfalfa, wheat, pasture, and all other crops.

Foliar Opp application is simple: a one-pass solution with a low application rate of 2–3 GPA. It is non-corrosive on equipment and is safe for Roundup® tank mixing. This product is available in bulk and a convenient 275-gallon mini-bulk tank.

The potassium in Foliar Opp may also increase the effectiveness of starter fertilizer. Ask your SOIL Service sales representative for more information.

SLOW RELEASE NITROGEN

Max72-SRN® is easy to handle, non-corrosive on equipment, and safe to apply with other chemicals and fertilizers, saving you time.

Max72-SRN

Max72-SRN is a non-burning solution for use on row crops, turf, vegetables, and fruit. Containing 72% slow release nitrogen—the maximum percentage available on the market—it provides more than three times the slow release nitrogen of many competing products.* Tests have shown it remains available to crops for up to six weeks in the soil, and up to four weeks on the leaves.

Foliar feeding Max72-SRN minimizes N loss and coats leaves, lasting for weeks while the plant tissue absorbs it. Its staying power makes it an ideal delivery partner for both crop protection chemicals and glyphosate herbicides, keeping these products on the crop or the weed for a longer period of time.

*At a rate of one gallon per acre.

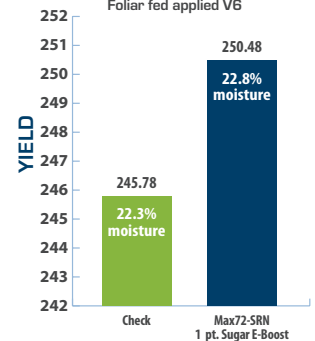
2075-SRN® offers maximum nitrogen with sulfur and potassium.

2075-SRN

If your crops need a nutrient boost during the growing season—especially after heavy rains, wind, or hail—we recommend 2075-SRN. With our high-performing Max72-SRN as a foundation, this clear liquid fertilizer delivers nitrogen, sulfur, and potassium for crops to absorb throughout the growing season. It can be applied as a foliar spray or by an irrigation system, and it mixes well with herbicides and fungicides.

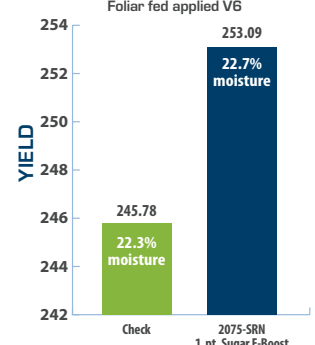
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Max72-SRN—1 GPA Corn
Foliar fed applied V6



2017 SOIL Service, Inc. Research

2075-SRN—1 GPA Corn
Foliar fed applied V6



NUTRIENT RECYCLING PROGRAM

The SOIL Service Nutrient Recycling Program (NRP) provides the tools your fields need to digest plant residue, paving the way for healthier, more productive soil.

It's common for leaves, roots, stalks, and cobs from a previous crop or cover crop to remain in a field for a year or more. This undigested residue may harbor destructive diseases and insects that impact overall crop health and quality. But if properly digested, this residue also contains a wealth of nutrients that help build organic matter and improve soil composition.

Our Nutrient Recycling Program should be applied in the fall or spring to help break down residue from the previous crop. It can be paired with most herbicide programs.



NRP consists of the following products:

**Nutrapathic™
Soil Restore**



**Nutrapathic™ Liquid
Bacteria Concentrate**



**Sugar
E-Boost®**



**SOIL
Cal®**

SUGAR E-BOOST



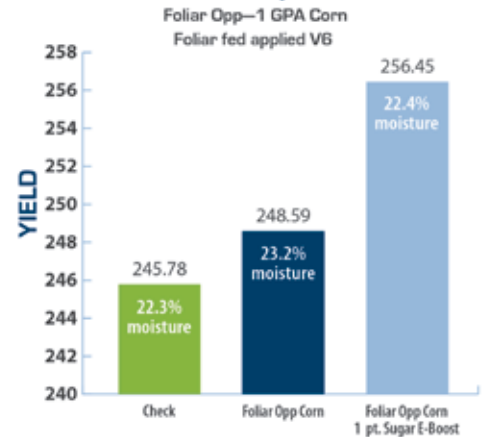
Sugar E-Boost is a natural liquid that provides a sustained source of energy to plants so growing crops can more efficiently translocate and use nutrients. In more than three years of testing, it has been proven time and again that adding Sugar E-Boost to any foliar feed boosts the energy and overall health of crops.

In addition to foliar feeding, Sugar E-Boost can be:

- Applied at planting
- Applied as a side-dress or transplant
- Fertigated

Sugar E-Boost doesn't freeze or crystallize, has no chlorides, and has good storage properties. It is safe for use on all crops and is compatible with most herbicides, insecticides, and fungicides.

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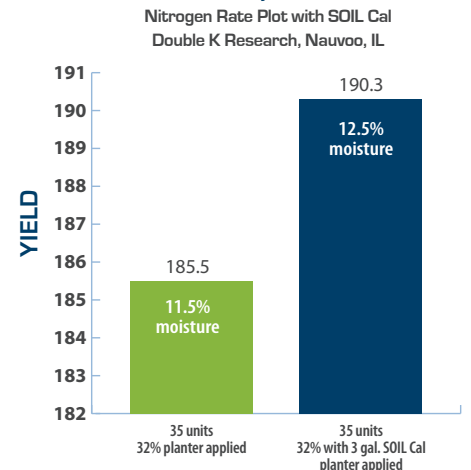
SOIL CAL

You should be using SOIL Cal if you apply liquid nitrogen in the form of 28-32%. SOIL Cal is an excellent nitrogen stabilizer that readily mixes with nitrogen formulations to keep nitrogen stable in your soil profile.



SOIL Cal is one of four components in our Nutrient Recycling Program, a program that stimulates natural biological life in the soil to break down the stalks and stubble left in the fall. The longer the microbes have to work on the crop residue, the more nutrients are released for next year's crop. Biological activity keeps soil bacteria and fungi in a healthy balance, benefiting your crop's potential yield and overall plant health.

SOIL Service, Inc. Research



SOIL BOOST EXTREME: TAKE BACK YOUR FIELDS

Farmers facing the toughest weeds are using the toughest dicamba herbicides. SOIL BOOST EXTREME is an adjuvant spray surfactant approved for use with dicamba-containing herbicides and pesticides.

SOIL BOOST EXTREME is formulated to mix with and increase the effectiveness of herbicides and pesticides in all crops. Its proprietary buffering, penetration, and translocation agents significantly boost penetration and movement in target weeds.

Controlling the pH of spray solutions is critical to achieving maximum absorption. Like SOIL BOOST PLUS®, SOIL BOOST EXTREME acts as a hard water conditioner. It buffers your spray solutions and maintains pH at approved levels, while increasing the effectiveness and activity of glyphosate when calcium, magnesium, and iron are present.

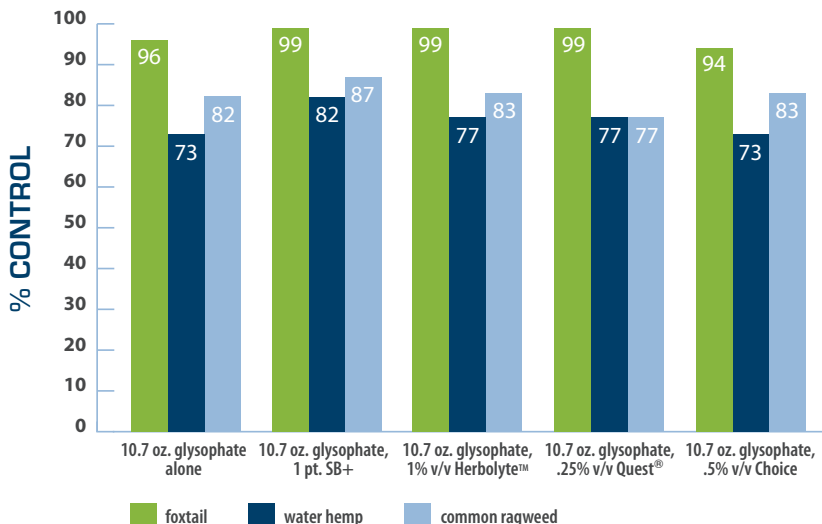


SOIL BOOST EXTREME:

- Offers a low use rate of 1 qt./100 gal. of water.
- Meets EPA no-AMS requirement for mixing with Enlist (2,4-D) as well as Xtend and Engenia (dicamba).
- Buffers pH of hard water spray solutions to approved level of 5.5.
- Was expertly developed during 3 years of university and on-farm testing.
- Is available in 2.5-gal. jugs or 275-gal. totes.
- Is Enlist approved. Xtend and Engenia approval are pending.



SOIL Service, Inc. Research
Hard H₂O Study - 250 Grains of Hardness
Southern Illinois University



SOIL BOOST PLUS®: BETTER THAN AMS

If you are looking for an easy-to-use, cost-effective alternative to ammonium sulfate (AMS), look no further. SOIL BOOST PLUS provides two key benefits in one product. Alternatives may provide one benefit or the other, but few do both.

- Ensures pesticides perform as intended by tying up hard water minerals.
- Lowers the pH of your solution to 5 so it is easily absorbed into plant leaves.

Tap water often contains magnesium, calcium, and iron, which can increase the pH of the water in your solution to over 7. Calcium ties up glyphosate, and an elevated pH inhibits absorption.

SOIL BOOST PLUS contains some AMS and a pH-lowering ester to drop the pH of your water to about 5. Adding just one pint per acre controls the pH, eliminating the need for a pH tester. SOIL BOOST PLUS also contains proprietary buffering, penetration, and translocation agents to significantly boost the penetration and movement of most pesticides in the target plants.



LANDOIL®

Landoil is a premium product used as a replacement for crop oil and non-ionic surfactants. We have done extensive research to ensure our adjuvant system maximizes the effectiveness of your chemicals.

- **Support local growers.** Landoil is a soybean-oil-based spray surfactant made from soybeans grown right here in the Midwest.
- **Spread and stick better.** Landoil chemicals not only cover the surface you are spraying, they also stay there until the chemicals penetrate the plants. Landoil is a tremendous spreader and sticker.
- **Penetrate better.** Landoil's excellent penetration and translocation capabilities mean you'll hit your target and, as with glyphosate, move the chemicals throughout the plant.
- **Limit drift.** Landoil's drift-control properties get more of your pesticide on target, saving you both time and money.
- **Rain fast.** Landoil helps chemicals stick to the leaf, often within 20 minutes, so they are less susceptible to washing off.
- **Use with SOIL BOOST PLUS®.**

SPRAY SURFACTANTS:

Reduce the surface tension between the spray droplet or pesticide and the leaf surface when added to fertilizer. Your chemicals cover more surface, stay there longer, and penetrate better.



ROGUE VT™

The Rogue VT is an American-made vertical tillage tool that aerates soil and alleviates deep soil compaction, while creating a smooth seedbed. As it works your soil, the Rogue VT also manages crop residue to help prevent erosion and improve water infiltration—key factors in optimizing soil health and getting the most out of your crops.

In addition to sizing and incorporating residue, the Rogue perfectly conditions soil by fracturing it up to 8 inches below the surface. This deep fracturing eliminates compaction and allows the next crop to easily absorb moisture and access nutrients. Most crop residue is left near the soil surface, providing crucial erosion control.

Growers can add coulters and/or harrows to the Rogue. Its strong frame flexes up to 15 degrees down and infinitely upward. The Rogue can also be used to aerate pastures and hay ground.

Available in 4 working widths: 16½' - 24' - 31½' - 39'

Additional features:

- Shorter rollers keep dirt away from critical parts, extending bearing life
- Gang angles and coulter depth settings adjustable without a wrench
- Walking tandem wheels with high-quality tires
- Two-year breakage warranty, INCLUDING the tines



SOIL Service, Inc. completes extensive testing with all our products at our warehouse and research farm near Niota, Illinois. We are dedicated to selling and developing an extensive line of soil additives to facilitate improved crop performance for all our customers' unique needs.